

AMENDMENTS TO THE CLAIMS:

1 – 44. (Canceled)

45. A method for abating contamination present within a cavity in a structure, comprising the steps of:

exhausting contaminated air in the cavity in a controlled manner through one or more outlet openings in the structure that are in flow communication with the cavity; and

treating a contaminated surface in the cavity in a manner that is substantially non-destructive to the contaminated surface.

46. The method as in claim 45, wherein the treating step comprises at least one of (a) killing, destroying or removing at least a substantial portion of contaminants present on the contaminated surface, and (b) applying a material to the contaminated surface to limit dispersal of contaminants within the cavity and/or re-contamination of the contaminated surface.

47. The method as in claim 46, wherein the treating step comprises introducing a biocide into the cavity.

48. The method as in claim 47, wherein the biocide is introduced into the cavity in at least one of a mist, powder, granule, spray, vapor, foam, fog, gas, and liquid.

49. The method as in claim 45, wherein the cavity is substantially or completely enclosed by the structure.

50. The method as in claim 49, wherein the structure is at least one of a permanent, semi-permanent and temporary structure.

51. The method as in claim 50, wherein at least a portion of the structure substantially or completely enclosing the cavity comprises at least one of a wall, a ceiling or a floor.

52. The method as in claim 45, wherein the exhausting step limits flow of contaminated air into the ambient environment.

53. The method as in claim 52, wherein the exhausting step removes at least a portion of the contaminated air from the cavity through said one or more outlet openings.

54. The method as in claim 53, further comprising the step of removing contaminants from the contaminated air by filtration.

55. The method as in claim 54, further comprising the step of returning the previously exhausted air to the cavity in a closed loop process.

56. The method as in claim 45, further the exhausting step comprises the step of establishing a pressure gradient in the cavity.

57. The method as in claim 56, wherein the pressure gradient is established by at least one of drawing air from within the cavity through said one or more outlet openings and causing movement of air into the cavity through one or more inlet openings provided in the structure in flow communication with the cavity.

58. The method as in claim 57, wherein a pliable seal is provided to seal the outlet opening to a device for drawing air from the cavity.

59. The method as in claim 45, wherein said one or more outlet openings are 0.5 inch to 1.5 inch in diameter.

60. The method as in claim 57, wherein said one or more inlet openings are 0.25 inch to 1.0 inch in diameter.

61. The method as in claim 56, wherein the treating step comprises introducing a biocide into the cavity following the establishment of a pressure gradient.

62. The method as in claim 45, wherein the treating step comprises applying high frequency radio waves that are capable of penetrating into the cavity in which the contaminants are present, and that are capable of killing or destroying at least a substantial portion of the contaminants.

63. The method as in claim 62, wherein the high frequency radio waves are of a type capable of heating the contaminants to kill or destroy the contaminants.

64. The method as in claim 63, wherein the high frequency radio waves comprise microwaves.

65. The method as in claim 45, wherein the treating step is undertaken in conjunction with the exhausting step.

66. The method as in claim 47, wherein the biocide comprises an active ingredient that is in at least one of the following categories of materials: (a) oxidizers, (b) surfactants, (c) toxic metal donors, and (d) metabolic toxins.

67. The method as in claim 66, wherein:

the oxidizers include at least one of bromine, N-bromoacetamide, 3-bromo-1-chloro 5,5 dimethylhydantoin, hydrogen peroxide, hypochlorite bleach solution, iodine, N-bromoacetamide, and ozone;

the surfactants include at least one of lauryl pyridinium chloride, quaternary ammonium salts, quaternary ammonium solutions, higher molecular weight alcohol, and d-limonene;

the toxic metal donors include at least one of borax (sodium tetraborate decahydrate), disodium octaborate tetrahydrate, boric acid, calomel (mercurous chloride), copper hydroxide, copper sulfate, maneb, mancozeb, sulfur, and zineb; and

the metabolic poisons include at least one of benomyl, captan, captafol, cyanides, sulfides, and streptomycin.

68. The method as in claim 47, wherein the biocide comprises TTM-BOR®.

69. The method as in claim 45, wherein the treating step comprises the step of introducing a lock-down material into the cavity.

70. The method as in claim 69, wherein the exhausting step comprises the step of establishing a pressure gradient in the cavity facilitating the dispersal of the lock-down material in the cavity.

71. The method as in claim 69, wherein the lock-down material provides a barrier to contaminants on at least a portion of the surface of the structure enclosing the cavity.

72. The method as in claim 69, wherein the lock-down material is introduced into the cavity in at least one of a mist, powder, granule, spray, vapor, foam, gas, fog, or liquid.

73. The method as in claim 69, wherein the lock-down material includes a material within at least one of the following classes of materials: (a) substituted ethylene monomers; and (b) cyanoacrylic based adhesive.

74. The method as in claim 73, wherein the substituted ethylene monomers include at least one of styrene and butadiene.

75. The method as in claim 45, wherein the treating step comprises both the killing, destroying or removing step and the applying the material step.

76. The method as in claim 75, wherein the applying the material step is undertaken in conjunction with the killing, destroying or removing step.

77. The method as in claim 45, wherein the treating step is undertaken in conjunction with the exhausting step.

78. The method as in claim 45, wherein the contamination is associated with an undesirable substance.

79. The method as in claim 78, wherein the contamination is associated with a harmful substance that has harmful health effects on humans and/or other living beings.

80. The method as in claim 79, wherein the harmful substance includes a harmful organism that is at least one of a saprophytic organism, a parasitic spore-producing organism, and an organism that lacks chlorophyll.

81. The method as in claim 79, wherein the harmful substance includes at least one of fungus and bacteria.

82. The method as in claim 81, wherein the fungus includes at least one of mold, mildew, rust, yeast, mushroom, smut, and any mycotoxin, spore, scent, and byproduct produced and/or released by the fungus.

83. A method for abating contamination of a contaminate surface of an open structure, comprising the steps of:

creating a temporary enclosing structure substantially or completely enclose a cavity, at least one portion of the structure is comprised of the contaminated surface of the open structure; and

abating contamination present within the cavity in accordance with the method as in claim 45.

84. The method as in claim 83, wherein the creating step comprises the step of providing a hood in conjunction with the open structure to form the enclosing structure.

85. A system for abating contamination present within a cavity that is substantially or completely enclosed by a structure, comprising:

a first device exhausting contaminated air in the cavity in a controlled manner through one or more outlet openings in the structure that are in flow communication with the cavity; and

a second device for treating a contaminated surface in the cavity in a manner that is substantially non-destructive to the contaminated surface.

86. The system as in claim 85, wherein the first device comprises a suction device in flow communication with the cavity through said one or more outlet openings.

87. The system as in claim 85, wherein the second device is structured and configured to undertake at least one of killing, destroying or removing at least a substantial portion of contaminants present on the contaminated surface, and of applying a material to the contaminated surface to at least one of to limit dispersal of contaminants within the cavity and/or re-contamination of the contaminated surface.

88. A system for abating contamination present on the surface of an open structure, comprising:

a first device creating a temporary enclosing structure substantially or completely enclose a cavity, at least one portion of the structure is comprised of the contaminated surface of the open structure; and

a second device abating contamination present within the cavity in accordance with the system as in claim 85.

89. The system as in claim 88, wherein the first device comprises a hood structure.

90. A system for abating contamination present within a cavity that is substantially or completely enclosed by a structure having one or more outlet openings that are in flow communication with the cavity and one or more inlet openings that are in flow communication with the cavity, comprising:

a first device exhausting contaminated air from within the cavity and removing contaminant in the contaminated air; and

a second device returning such exhausted contaminated air with contaminant removed back to the cavity through said one or more inlet openings.

91. The system as in claim 90, further comprising a container containing a lock-down material, in flow communication with said one or more inlet openings.

92. The system as in claim 90, wherein the first device and the second device are comprised in a same device.

93. The system as in claim 90, wherein previously removed air from said one or more outlet openings is recirculated to said one or more inlet openings in a closed loop manner.